United States. Three main groups are recognized: one with very few-flowered spikes, growing on conifers, about equally divided between the United States and the Mexican highlands, comprising 12 species; one with more numerous flowers, growing on various angiosperms, comprising 11 United States and 18 Mexican species, also limited to the North; and one, differing from the second in the constant presence of scales at the base of at least its lowermost internodes, containing 14 Mexican and 17 Central American species. The first two groups are distinctly boreal and neither passes into the West Indies. The third group is distinctly equatorial, disappears well below the boundary between Mexico and the United States, and contains the exclusive representation of the genus in South America and the Antilles, more than half of its species occurring in this extralimital region. Except for two of these tropical species to which a wide range is ascribed, none occurs over so large an area as the common mistletoe of the eastern United States, which in distribution about coincides with the bald cypress.

A new aquatic fungus.—Allomyces arbuscula, a new generic type of the Leptomitaceae, has been described by Butler, 29 who found the fungus growing on dead flies in still water in Pusa and Poona, India. The individual plants consist of a basal cell which is attached to the fly by means of rhizoids, and at the apex branches more or less dichotomously to form a fan-shaped body of a few short cells. These give off slender branches which terminate either in zoosporangia or in sporangia containing a single thick-walled, brown resting spore. After the formation of a terminal sporangium, the axis is continued by a branch arising below the sporangium. Thus a sympodial system is built up as in *Phytophthora*. The fungus is peculiar in having a completely septate thallus, not usual among the Phycomycetes. The author regards it as a near ally to *Blastocladia* on account of the peculiar parthenogenetically developed oospores, which he suggests may have been derived from the *Monoble pharis* type through loss of the motile sperms.—H. Hasselbring.

A bee hive fungus.—Miss Betts<sup>30</sup> has described a new genus (*Pericystis alvei*) of "bee-hive fungus," which grows on pollen stored in the combs of the honey bee. The fungus is said to be "undoubtedly a normal inmate of the healthy bee-hive, and is, so far as is known, confined to that habitat."—J. M. C.

<sup>&</sup>lt;sup>29</sup> Butler, E. J., On Allomyces, a new aquatic fungus. Ann. Botany 25:1023-1035. figs. 8. 1911.

<sup>30</sup> Betts, Annie D., A bee-hive fungus, Pericystis alvei, gen. et sp. nov. Ann. Botany 26:795-799. pls. 75, 76. 1912.